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Dairy-Herd-Improvement Letter

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DHIA COWS NEAR THE 12,000-POUND LEVEL OF MILK PRODUCTION

In 1964-65, DHIA cows on Standard test produced an average of 11,976 pounds of milk and 457 pounds of butterfat. This record was made by 1,821,252 cows in 35,604 herds, averaging 51.2 cows per herd. It is an increase of 291 pounds of milk, 10 pounds of butterfat, and 1.8 cows per herd over 1963-64.

DHIA COWS EXCEED NON-DHIA COWS BY 4,708 POUNDS OF MILK

The importance of DHIA recordkeeping continues to be increasingly evident. In 1964-65, DHIA cows were superior in milk yield to non-DHIA cows by 65 percent, or 4,708 pounds. With milk in DHIA herds valued at \$4.59 per hundredweight, this amounts to a yearly gross income advantage of \$216 per cow or \$10,800 for a 50-cow herd.

During the 3-year period since 1962, yearly increases in milk yield per cow have been 348 pounds in DHIA and 176 pounds for all other cows. Thus, in addition to the 4,708-pound superiority in milk yield in 1964-65, the rate of increase has been 98 percent more rapid for DHIA cows since 1962. Such statistics clearly demonstrate the importance of, and results from participation in DHIA recordkeeping. A summary of the production performance of cows in DHIA and non-DHIA herds in the United States is shown in table 1.

dollars, respectively. Changes and general trends were similar for each of the other breeds as well.

Although 12 less Ayrshire herds were tabulated this year than last, 92 herds produced 11,500 pounds of milk or more compared with 69 a year ago; 8 produced 13,500 pounds or more, whereas only 3 herds did so a year ago. Guernsey herds at or above the 11,500-pound level of production numbered 85 compared with 61 a year ago. Holstein herds at the 15,500-pound level or above increased 288 over last year. A total of 66 Holstein herds exceeded 17,499 pounds of milk. Jersey herds producing 9,500 pounds and above numbered 231 in 1964-65; in 1963-64, 187 such herds were reported. Brown Swiss herds at or above the 12,500-pound level of production numbered 104 this year compared with 72 a year ago. Even though 15 fewer Milking Shorthorn herds were reported this year than last, 14 herds produced at or above the 10,500-pound level this year compared to 9 herds last year. All of these production averages reflect the actual yield of DHIA cows during a 12-month period.

It must be realized that the applicability of these DHIA herd statistics to individual herds will have the greatest meaning where local feeding systems and costs and milk markets are resonably consistent with U.S. averages. Herds of the same breed having similar levels of milk yield may differ considerably in production efficiency if a wide range exists in milk prices, feeding systems and costs, and labor and other costs.

OWNER-SAMPLER HERD SUMMARIES 1964-65

Summaries of Owner-Sampler herd statistics are shown in tables 9 through 14. A total of 559,606 cows in 18,409 herds averaged 11,402 pounds of milk and 423 pounds of butterfat in 1964-65. This is an increase of 517 pounds of milk and 19 pounds of butterfat over 1963-64. The increase in reporting Owner-Sampler records was encouraging this year. The herds reported numbered 4,835 more than a year ago, and complete herd reports totaled 3,322 more than a year ago.

Cow-year averages by States for all data reported are given in table 9. Similar averages based on complete reports are shown in table 10. Stratifications of Owner-Sampler herds by butterfat production, level of concentrates fed, and feed cost per hundredweight of milk are shown in tables 11, 12, and 13, respectively. Summaries by breed with stratifications by level of milk yield are shown in table 14.

TABLE 1. -- Summary of production of Standard DHIA and non-DHIA cows

rity	COWS	Fat	Pounds	129	152	168	162	170	277	1/5	179	180	1 5	130	
Superiority	Of DHIP	Milk	Pounds	3,207	3,614	4,059	3,955	7707	4,240	4,293	4,414	7,695	1000	4,700	
1/	-	Fat	Pounds	174	179	202	272	10/1	2/ 240	251	255	250	2,0	107	
Non-DHIA cows		Fat	Percent	3.92	3.96	3,95	3 77	, ,	5/ 3, /4	3.72	3,71	200		7.07	
Non-		Mi1k	Pounds	4,435	4,519	5,113	2,27		5/6,550	6,739	6.872	000	0,000	7,208	
		Fat	Pounds	303	331	370	0/7/	14/1	418	426	787		/tt/	45/	
		Fat	Percent	3.96	70.4	7 03	000	10.01	3.87	3.86	200) c	3,03	3.82	
		Milk	Pounds	7.642	2 1 3 3	173	7,17	4/10,001	10,796	11,032	11,286	11,400	11,685	11,976	
Standard DHIA cows	Domoont of	all cows 3/	네삤	2 3	, 0		4 (χ. Σ	10.6	11.3	11100	O°TT	12.2	13.0	
Sta	1	Cows	Number	70 7	10.7	7.47	7.17	42.3	43.9	9 9 7	700	4/00	49.4	52.1	
			Number	07.0	001,049	0/0, I4I	1,088,872	1,746,752	1,867,469	1,000	L, 200, 000	2,006,534	2,010,144	2,087,581	
		, ,	Year 2/ Herds Number											40,075	
			Year	0	1930	1940	1950	1960	1061	1001	7061	1963	1964	1965	

January 1, 1965 DHIA enrollment cow population and production figures, excluding heifers not fresh; estimated by the Statistical Reporting Derived using U.S. Service.

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The year for which the Standard January 1 enrollment is given.

The year for which the Standary 1, 1965 DHIA enrollmer of alculated using U.S. calendar year cow numbers for year previous to stated year; for example: January 1, 1965 DHIA enrollmer of 2,087,581 cows is 13.0 percent of the 1964 U.S. cows.

Average of 1958-59 and 1960-61 because testing year changed in 1961.

Comparison began to be made between DHIA production for the testing year ending May 14 of the stated year and U.S. production for the previous calendar year.

ABLE 2.--A 10-year summary of DHIA cow-year averages for herds reporting complete information

Income	over	teed cost	અ	252	265	272	280	283	2020	207	270	284	292	1
,	Feed	cost	wi	181	183	190	195	106	100	200	207	227	777	1
Cost	of	conc	어	98	88	92	03	000	0 7	7 0	113	120	127	171
Value	of	product	W)	433	448	797	7.75	100	707	0 0 0	202	501	177	600
Days	uo	pasture	No	174	173	171	177	1 7	109	103	165	150 151	151	101
Dry	forage	fed	Cwt.	39	39	707	0 0) (040	39	40,	0 6	n n	20
Succ.	forage	fed_	Cwt.	94	99	09	7 0	0,1	9/	8/	22	25.0	, 20 0	707
	Conc.	fed	Cwt.	29	30	2,5	1 (00	33	32	36	33	7.4	1
		Fat	rp.	372	377	000	0 0	39 L	391	390	413	423	439	449
	***	Fat	Pct.	3,93	3 00	7,0	10°0	3.89	3.89	3.88	3.87	3.85	3.84	3.82
		Milk	rp:	0 470	0,470	7,000	7,01	TO,042	10,045	10,048	10,676	10,983	11,428	11,744
	Cows	per herd	No	30 1	100	0 F	32.1	32.5	34.3	37.0	38.6	40.2	42.1	43.5
		Cows	No.	0/0 3//	110,010	803,273	900,269	902,074	795,892	689,710	882,827	1,089,290	1,173,099	1,229,676
		Herds	No.	, 20 00	407607	27,133	27,525	27,796	23,220	18,644	22,853	27,093	27,893	28,237
		Voor	1001	7000	1933-36	1926-57	1957-58	1958-59	1959-60 1/	1960-61	1961-62	1962-63	1963-64	1964-65

Average of 1958-59 and 1960-61 because of change in testing year. 1

TABLE 3.--Summary of 1964-65 Standard DHIA cow-year production, by States 1/2

	Herd		Cows	Cow-year		roduction
State	records Number	Cow-years Number	per herd Number	Milk Pounds	Fat Percent	Fat Pounds
Alabama	252 5	21,444 164	85.1 32.8	8,958 11,127	3.9 3.7	351 414
Arizona	124	18,916	152.5	12,440	3.6	453
	6.5	·	46.3	10 /25	2.6	270
Arkansas	65 1,847	3,010 318,893	46.3 172.7	10,435 12,814	3.6 3.8	379 485
Colorado	184	11,486	62.4	12,214	3.7	451
Common this much	413	21,686	52.5	12,492	4.0	494
Connecticut Delaware	95	4,331	45.6	11,605	3.9	448
Florida	87	14,351	165.0	9,083	4.1	369
Georgia	317	21,926	69.2	10,495	3.8	403
Idaho	455	17,999	39.6	11,295	3.9	440
Illinois	1,444	56,247	39.0	11,911	3.8	458
Indiana	1,026	38,142	37.2	11,937	3.9	466
Iowa	1,466	50,373	34.4	11,648	3.8	438
Kansas	684	29,627	43.3	11,821	3.8	445
Kentucky	380	15,141	39.8	10,544	3.9	407
Louisiana	46 418	3,662 17,424	79.6 41.7	8,347 11,699	3.9 4.0	326 468
maine	410	17,424	41.7	11,099	4.0	400
Maryland	691	37,274	53.9	11,279	3.9	441
Massachusetts	458 1,967	20,573 78,535	44.9 39.9	12,148 12,499	3.9 3.8	479 469
Michigan	1,707	70,555	37.7	12,77	5.0	407
Minnesota	3,119	101,344	32.5	11,886	3.7	441
Mississippi Missouri	137 370	9,094 16,750	66.4 45.3	8,196 11,228	4.1 3.9	333 433
		ŕ				
Montana Nebraska	65 250	3,363 11,069	51.7 44.3	11,808 11,412	3.6 3.8	429 431
Nevada	19	1,866	98.2	11,713	3.9	457
W. W	276	10 171	// 1	11 607	/ 0	7.71
New Hampshire New Jersey	276 426	12,171 23,384	44.1 54.9	11,697 12,163	4.0 3.8	471 463
New Mexico	26	3,820	146.9	12,081	3.7	445
New York	3,596	170,811	47.5	12,854	3.7	475
North Carolina	715	39,607	55.4	11,376	3.8	429
North Dakota	139	4,925	35.4	10,946	3.7	407
Ohio	2,034	78,428	38.6	12,046	3.8	462
0klahoma	143	8,177	57.2	10,821	3.6	393
Oregon	326	20,190	61.9	10,879	4.1	450
Pennsylvania	4,407	160,507	36.4	12,066	3.9	473
Puerto Rico	5	1,053	210.6	7,672	3.4	263
Rhode Island	36	1,773	49.3	12,036	3.9	470
South Carolina	226	19,081	84.4	9,753	4.0	393
South Dakota Tennessee	144 432	5,795 22,637	40.2 52.4	11,466 9,692	3.6 4.1	412 394
		22,007	32.4			
Texas Utah	273 351	22,112 16 176	81.0	10,657	3.7 3.7	396 457
Vermont	834	16,176 39,503	46.1 47.4	12,297 11,242	4.0	447
Virginia						
Virginia	968 705	55,707 41,603	57.5 59.0	11,732 12,394	3.8 3.9	445 485
West Virginia	190	8,030	42.3	10,627	3.9	411
Wisconsin	2,950	120,249	40.8	12,210	3.8	461
Wyoming	2,930	860	39.1	10,730	3.7	398
Total or average	35,604	1,821,252	51.2	11,976	3.8	457
	33,304	.,021,232	2102	11,770		

^{1/} Includes all production data reported.

(3) x

TABLE 4..--Summary of 1964-65 Standard DHIA records, by States $\underline{1}^{\prime}$

State	Herds	Body	Cow-vears	Mi 1k	Fat	Fat	Days in milk	Concen- trates fed	forage fed	Dry forage fed	Value of product	Cost of concen- trates		Income over feed cost	per cwt.
	S N	OM.		ipi	Pct.		Pct.	Cwt.	Cwt	Cwt.	ઝ		બ	બ	
Alabama Arkansas Connecticut	250 65 388	12110	21,396 3,010 20,447	8,964 10,435 12,529	3.9	351 379 495	883 84	47 43 52	49 30 141	15 39 31	509 474 696	147 129 186	231 223 324	278 251 372	2.57 2.13 2.59
Delaware Florida Georgia	95 78 314	12 10 11	4,331 13,177 21,719	11,605 9,045 10,492	3.9 3.8	448 369 403	883 84	41 46 45	139 65 84	23 22 17	615 583 615	125 147 145	278 254 257	337 329 358	2.40 2.81 2.45
Idaho Illinois Indiana	236 1,423 1,025	122	9,243 55,482 38,085	10,934 11,898 11,936	3.9	433 458 466	86 84 85	29 41 42	55 81 106	84 42 36	421 468 496	79 98 105	199 194 220	222 274 276	1.82 1.63 1.84
I owa	1,466 669 368	122	50,373 29,063 14,674	11,648 11,823 10,539	886	438 445 406	85 84 84	46 49 39	97 104 68	42 42 30	423 492 462	107 128 114	187 229 218	236 263 244	1.61 1.94 2.07
Louisiana Maine Maryland	46 416 590	10 12 12	3,662 17,375 31,298	8,347 11,696 11,346	3.9	326 468 446	81 85 85	37 45 44	55 74 130	12 45 26	477 603 570	119 161 134	209 274 282	268 329 288	2.51 2.34 2.48
Massachusetts Michigan Minnesota	447 • 1,940 3,023	1222	19,903 77,350 98,270	12,191 12,508 11,895	3.7	479 469 441	88 85 85	44 44 42	114 98 94	41 45 48	704 514 419	175 97 86	330 200 168	374 314 251	2.71 1.60 1.41
Mississippi Missouri Montana	131 358 18	10 12 14	8,598 16,302 943	8,316 11,250 12,140	4.1 3.9 3.4	337 434 418	885 865	36 42 36	84 75 49	12 36 95	425 474 489	113 111 84	193 210 207	232 264 282	2.32 1.87 1.71
Nebraska New Hampshire New Jersey	250 276 384	12 12 12	11,069 12,171 21,060	11,412 11,697 12,123	3.8	431 471 461	85 84 84	44 43	103 102 152	48 45 35	454 629 634	114 151 147	203 302 320	251 327 314	1.78 2.58 2.64
New YorkNorth Carolina	3,596 713 138	12 13 13	170,811 39,403 4,899	12,854 11,364 10,945	3.7	475 429 407	83 85	43 47 41	114 159 95	44 12 46	583 655 402	142 160 83	267 295 157	316 360 245	2.08 2.59 1.44
OhioOklahomaOregon	1,978 143 13	117	76,434 8,177 635	12,054 10,821 9,648	3.8	462 393 425	86 86 86	44 45 31	112 45 87	40 52 42	512 499 504	110 124 94	236 223 205	276 276 299	1.96 2.06 2.13
Pennsylvania Puerto Rico Rhode Island	4,393 3	11 12 13	159,943 801 1,760	12,073 8,339 12,036	6.6.6 6.0.6	473 289 470	85 74 85	46 41 48	104 143	39 31	580 642 775	144 171 176	282 2 65 3 65	298 377 410	2.34 3.18 3.03
South Carolina South Dakota Tennessee	225 144 428	11 13	19,064 5,795 22,483	9,751 11,466 9,701	4.0 3.6 4.1	393 412 395	84 84 84	40 41 37	110 93 95	17 54 25	565 450 496	129 97 114	251 192 223	314 258 273	2.57 1.68 2.30
TexasVermontVirginia	263 769 951	11 11 12	21,252 36,395 54,795	10,666 11,267 11,728	3.7 4.0 3.8	396 449 445	8838	49 46	52 71 134	36 45 20	531 551 616	142 138 150	253 256 294	278 295 322	2.27 2.27 2.51
Washington West Virginia	187	10	7,946	10,825	3.9	464 412	1 58	39	34 91	30	567 519	120 123	219 248	348 271	2.33
Total or average	28,237	12	1,229,676	11,744	3.8	677	85	77	102	38	539	127	244	295	2.08
average 2/	35,604		1,821,252	11,976	3.8	457									

1/ Cow-year basis, based on complete individual herd reports. $\overline{2}/$ Based on all data reported in Table 3.

TABLE 5.--Summary of 1964-65 Standard DHIA yearly herd averages, stratified by butterfat pounds $\underline{1}^{j}$

Feed cost per cwt.	બ	3.18	2.93	2.64	2.38	2.24	2.09	2.01	1.97	1,95	1,95	2.00	1.98	1,82	1.98		2.05
Income over feed cost	બ	91	103	138	179	211	246	282	324	363	411	455	525	519	418		288
Feed	બ	120	154	170	184	202	217	234	256	277	299	328	352	324	329		238
Cost of concen- trates	બ	63	9/	83	93	102	111	122	135	149	163	182	192	200	185		125
Value of product	બ	211	257	308	363	413	463	516	580	049	710	783	877	843	747		526
Dry forage fed	Cwt.	12	29	30	32	36	39	41	42	43	77	47	47	26	114		40
Succ. forage fed	Cwt.	24	47	54	65	9/	85	93	101	108	113	113	124	90	36		93
Concen- trates fed	Cwt.	20	25	29	33	36	40	77	47	51	55	58	62	62	73		44
Days in milk	Pct.	63	71	77	80	83	84	85	98	87	87	88	88	91	16		82
Fat	re	156	207	255	304	353	402	450	498	545	593	642	169	743	783		453
R to	Pct.	4.1	9.0	3.0	3.9	3.9	3,8	3.8	3.8	3.8	3.8	3.9	3.9	4.2	4.7		3.8
Mi 1k	9	3,825	5,286	6,507	7,799	9,139	10,468	11,749	13,082	14,271	15,427	16,529	17,819	17,838	16,595		11,817
Cow-vears	No.	73.5	57.2	51.0	8.64	46.5	44.4	43.4	45.4	41.2	41.9	39.8	39.5	18,7	1.7		43.5
Body	,	6	10	11	11	11	12	12	12	12	13	13	13	13	12		12
Herds	No	4	63	241	676	2,714	5,555	7,659	6,582	3,291	970	178	23	7	-1		28,237
Grouning	T.P.	125-174	175-224	225-274	275-324	325-374	375-424	425-474	475-524	525-574	575-624	625-674	675-724	725-774	775-824	Total or	average

All groupings and the total or average line are on a herd basis.

TABLE 6.--Summary of 1964-65 Standard DHIA yearly herd averages, stratified by cwt. concentrates fed $1/\sqrt{100}$

		5-6					Days	Concen-	4	-	Value	Cost of	F000	Income	Feed cost
Grouping	Herds	weight	Cow-years	Mi 1k	Fat	Fat	milk	fed	fed	fed	product	trates	cost	feed cost	per cwr. milk
Cwt.	No.	Cwt	No.	<u>rp</u> .	Pet.	rg]	Pct.	Cwt.	Cwt		બ	બ	« М	બ	တျ
No Rept.	7	10	51.2	9,703	3.7	360	82	1	129	45	909	1	155	351	1.79
Under 5	2	12	38.7	10,735	3.6	391	98	m	107	65	410	21	135	275	1.23
05-14	07	11	39.6	8,611	3,8	329	82	11	88	54	334	36	151	183	1.80
15-24	760	11	44.1	8,748	4.1	357	83	22	72	42	387	63	163	224	1.95
25-34	4,953	11	43.5	10,005	4.0	403	84	31	83	39	451	87	192	259	1.98
35-44	9,796	12	0.44	11,498	3.9	443	85	40	93	40	509	112	225	284	2.00
45-54	8,135	12	42.9	12,659	3.8	9/4	85	64	66	41	260	140	259	301	2.08
55-64	3,453	12	43.2	13,412	3.7	664	98	59	97	70	109	169	287	314	2.17
65-74	851	12	45.9	13,854	3.7	512	98	89	16	70	626	196	312	314	2.28
75-84	213	13	46.8	14,158	3.7	524	98	78	76	38	663	226	342	321	2.46
85-Up	27	12	42.2	15,033	3.6	246	87	88	78	37	719	266	377	342	2.52
Total or												1			
average	28,237	12	43.5	11,817	3,0	453	85	44	93	40	526	125	238	288	2.05
				;											

 $1/\sqrt{11}$ All groupings and the total or average line are on a herd basis.

TABLE 7.--Summary of 1964-65 Standard DHIA yearly herd averages, stratified by feed cost per cwt. milk \pm

milk	જા	1.47	1.99	2.46	2.93	3.44	3.93	4.47	4.84		2.05
feed cost	જા	294	295	289	253	202	157	100	125	0	887
cost	w	183	240	280	599	305	305	31.	322	0	238
trates	બ	76,	126	149	155	154	158	155	146		61
product	બ	477	535	269	552	207	462	421	447		976
	٠.	45	41	36	35	34	34	36	33	:	40
fed	Cwt.	82	93	101	107	104	82	90	28	,	93
fed	Cwt.	42	44	94	94	44	44	44	38		44
mi 1k	Pct.	98	85	85	84	82	81	4	80		85
Fat	-P	797	760	445	417	383	351	316	346		453
Fat	Pct.										3.8
Mi 1k	-P	12,496	12,044	11,408	10,227	8,873	7,770	7,064	6,652		11,817
Cow-years	No	36.6	43.2	48.7	54.1	58.1	50.3	30.4	15.1		43.5
weight	Cwt.	12	12	12	11	11	10	:::	10		12
Herds	No.	8,678	9,844	7,004	2,184	,421	83	18	5		28,237
Grouping	Cents	Under 175	175-224	225-274	275-324	325-374	375-424	425-474	475-Up	Total or	average
	weight Cow-vears Milk Fat Fat milk fed fed fed product trates cost i	ng Herds weight Cow-years Milk Fat Fat milk fed fed fed product trates cost in No. Cwt. No. Lb. Pct. Cwt. Cwt. Cwt. Swt. S.	Herds weight Cow-years Milk Fat Fat milk fed fed fed product trates cost feed cost No. Cart. No. Lb. Pct. Lb. Pct. Cart. Cart. Cart. Ac. Cart. S.	Herds weight Cow-years Milk Fat Fat milk fed fed product trates cost feed cost No. Coxt. No. Lb. Pet. Lb. Pet. Coxt. Coxt. Coxt. Syder Syder	Herds weight Cow-years Milk Fat Fat milk fed fed product trates cost feed cost of the co	Herds Weight Cow-years Milk Fat Fat milk fed fed fed product trates cost feed cost 100. Cort. No. Lib. Pet. Lib. Pet. Cowt. Cowt. Sec. Sec.	Herds Weight Cow-years Milk Fat Fat milk fed fed fed product trates cost feed cost No. Gat. No. Lb. Pet. Lb. Pet. Gat. Gat. Gat. Gat. Sat. Sat.	Herds weight Cow-years Milk Fat Fat milk fed fed product trates cost feed cost of the cost	Herds weight Cow-years Milk Fat Fat milk fed fed product trates cost feed cost of the cost	Herds weight Cow-years Milk Fat Fat milk fed fed fed product trates cost in the feat. Covt. Owt. Owt. Set in the feat of the product trates cost in the feat. Covt. Owt. Owt. Owt. Owt. Owt. Owt. Owt. Ow	No. Gart. No. Lo. Fet. Est. Fat. milk. Fed. Eed. Eed. Eed. Eed. Eed. Eed. Cast. Eed. Eed. Cost. Eed. Eed.

 $\underline{1}/$ All groupings and the total or average line are on a herd basis.

TABLE 8.--Summary of 1964-65 Standard DHIA yearly herd averages by breed, stratified by milk pounds $\frac{1}{2}$

Grouping	Herds	Body weight	Cow-years	Milk	Fat	Fat_	Days in milk	Concen- trates fed		Dry forage fed	Value of product	Cost of concen- trates	Feed	Income over feed cost	Feed cost per cwt. milk
Lb.	No.	Cwt.	No.	Lb.	Pct.	Lb.	Pct.	Cwt.	Cwt.	Cwt.	<u>\$</u>	<u>\$</u>	\$	<u>\$</u>	<u>\$</u>
AYRSHIRE															
Under 7,500 7,500-8,499 8,500-9,499 9,500-10,499 10,500-11,499 12,500-13,499 13,500-Up Total or	13 42 112 135 116 64 20 8	11 11 11 11 11 11 11 12	38.2 37.3 39.9 38.6 39.7 44.2 48.1 26.4	6,839 8,128 9,073 10,007 10,934 11,935 12,857 14,238	4.0 4.1 4.0 4.1 4.0 4.0 3.9	275 328 369 405 443 480 509 561	77 82 82 83 84 85 84	32 34 37 42 44 46 53	76 62 70 75 76 76 82 84	24 38 37 40 42 43 51 34	347 366 430 471 521 585 596 637	95 96 107 116 128 144 148	185 192 211 221 239 259 279 268	162 174 219 250 282 326 317 369	2.68 2.36 2.32 2.21 2.18 2.17 2.17
average	510	11	39.9	10,197	4.0	412	83	39	74	40	483	120	227	256	2.24
GUERNSEY															
Under 5,500 5,500- 6,499 6,500- 7,499 7,500- 8,499 8,500- 9,499 9,500-10,499 10,500-11,499 11,500-12,499 12,500-13,499 14,500-Up	12 54 206 409 635 511 229 67 14	10 10 10 10 10 10 11 11 11 11	51.0 67.0 41.6 43.8 42.2 40.8 39.7 38.5 37.5 28.4	5,107 6,072 7,088 8,061 8,989 9,949 10,910 11,887 12,902 15,392	4.8 4.7 4.8 4.8 4.8 4.7 4.6 4.3	247 287 339 385 431 478 515 544 574	74 79 83 85 86 87 87 87 88 87	20 29 31 33 36 40 42 45 47 58	63 61 70 70 74 74 67 70 82 119	33 24 32 34 36 37 41 41 48 40	287 347 376 427 471 527 569 607 645 755	60 90 92 97 103 117 124 136 137	160 177 186 195 204 221 232 245 258 314	127 170 190 232 267 306 337 362 387 441	3.13 2.92 2.63 2.41 2.27 2.23 2.13 2.06 2.00 2.04
Total or average	2,141	10	42.4	9,096	4.8	434	85	37	72	36	479	107	209	270	2.32
Hot ometal															
Under 6,500 6,500-7,499 7,500-8,499 8,500-9,499 9,500-10,499 10,500-11,499 11,500-12,499 12,500-13,499 14,500-15,499 14,500-16,499 16,500-17,499 17,500-18,499 17,500-18	40 94 268 674 1,563 2,851 4,146 4,538 3,644 2,015 725 725 727 54 12	11 11 11 12 12 12 12 12 12 13 13 13 13	51.2 54.5 54.0 46.4 45.4 45.2 45.2 43.0 41.6 42.1 40.5 38.9 33.6	5,957 7,115 8,088 9,068 10,057 11,041 12,023 12,994 13,966 14,930 15,918 16,896 17,890	3.7 3.7 3.7 3.7 3.7 3.7 3.7 3.7 3.7 3.7	220 266 300 335 370 406 442 477 513 547 582 616 649 702	72 78 80 82 83 84 85 86 86 87 87 88 89	27 30 33 35 38 41 44 47 49 56 58 69	58 68 80 82 89 93 100 103 106 108 106 98 100	34 32 30 37 38 40 42 43 44 45 46 48 49 50	277 324 371 399 437 475 513 557 603 646 698 748 800 891	79 84 95 98 107 114 122 131 141 151 164 176 189 206	171 176 192 200 213 2237 249 265 279 295 314 326 336	105 148 179 199 224 276 308 338 367 403 434 474 555	2.89 2.48 2.37 2.20 2.12 2.02 1.97 1.92 1.90 1.87 1.86 1.82
average	20,831	12	43.8	12,595	3.7	463	85	45	100	42	543	128	246	297	1.96
JERSEY															
Under 5,500 5,500-6,499 6,500-7,499 7,500-8,499 8,500-10,499 10,500-11,499 11,500-Up	41 123 290 465 432 170 47	9 9 9 9 9 9 10	39.3 43.1 49.6 44.1 45.2 45.5 45.3 36.7	4,918 6,138 7,056 8,012 8,948 9,895 10,920 12,177	5.1 5.1 5.1 5.1 5.1 4.9 4.5	249 312 363 412 459 500 532 551	76 80 84 85 86 86 86	25 29 32 35 38 41 45 48	32 46 54 54 56 56 78 65	26 26 29 32 33 34 32 42	254 322 384 434 483 543 599 634	70 83 94 103 112 131 144 159	136 154 177 190 201 227 249 270	118 168 207 244 282 316 350 364	2.77 2.51 2.51 2.37 2.25 2.30 2.28 2.22
Total or average	1,582	9	45.3	8,195	5.1	418	85	36	54	31	443	106	193	250	2.37

TABLE 8.--Summary of 1964-65 Standard DHIA yearly herd averages by breed, stratified by milk pounds $\frac{1}{2}$ --Continued

							Davis	Concen-	Cuga	Dry	Value	Cost of		Income	Feed cost
		Body					Days	trates	forage	forage	of	concen-	Feed	over	per cwt.
Grouping	Herds No.	weight Cwt.	Cow-years No.	Milk Lb.	Fat Pct.	Fat Lb.	milk Pct.	fed Cwt.	fed Cwt.	fed Cwt.	product \$	trates \$	cost \$	feed cost	milk \$
Lb.	NO.	CWL.	NO.	<u> 10.</u>	1001	201		<u> </u>		<u> </u>	-	-	-	-	¥
BROWN SWISS															
Under 7,500 7,500-8,499 8,500-9,499 9,500-10,499 10,500-11,499 11,500-12,499 12,500-13,499 13,500-14,499	15 30 77 124 148 119 73 25	12 12 13 12 13 13 13 13 14	26.1 30.0 31:0 33.5 33.1 31.5 32.9 29.3 24.0	6,676 8,050 9,016 10,017 10,992 11,952 13,010 13,978 15,173	4.0 4.1 4.1 4.1 4.1 4.2 4.1	268 323 367 411 453 490 540 578 626	75 80 83 84 85 86 87 89	30 35 36 40 43 45 50 53	53 67 72 77 85 88 98 59 74	40 47 45 46 46 46 58 56	266 324 388 422 467 519 577 590 667	78 88 95 105 112 121 139 132 157	159 181 196 210 216 231 255 243 276	107 143 192 212 251 288 322 347 391	2.42 2.24 2.18 2.10 1.97 1.93 1.96 1.74
Total or average	617	13	32.0	10,887	4.1	447	85	43	81	46	466	113	219	247	2.03
MILKING SHORTHORN 4,500- 5,499 5,500- 6,499 6,500- 7,499 7,500- 8,499 8,500- 9,499 9,500-10,499 10,500-11,499 11,500-12,499 12,500-13,499 Total or average	1 8 11 30 33 8 9 3 2	11 12 12 12 12 12 12 12 12 13	34.7 18.2 31.6 22.0 24.8 35.1 22.8 21.6 27.9	5,398 5,978 7,155 7,984 8,961 9,809 10,866 12,158 13,070 8,629	3.5 3.9 3.8 3.7 3.8 3.7 3.7 3.7 3.8	188 233 271 299 337 363 407 447 491	63 69 77 80 83 84 85 89 86	39 26 30 34 37 33 38 44	17 39 40 43 47 51 57 83 133	31 41 44 44 39 47 41 48 29	251 215 274 293 342 417 397 475 505	109 59 75 77 86 95 83 91 100	185 131 164 161 170 189 175 217	66 84 110 132 172 228 219 300 288	3.43 2.20 2.30 2.03 1.90 1.93 1.64 1.44
MIXED BREEDS															
Under 5,500 5,500-6,499 6,500-7,499 7,500-8,499 8,500-9,499 10,500-11,499 11,500-12,499 12,500-13,499 13,500-14,499 14,500-15,499 15,500-Up Total or average	21 46 112 191 307 447 443 387 281 150 35 15	10 10 10 10 11 11 11 11 11 11 11 11	68.5 54.1 57.7 54.3 50.0 47.4 47.3 38.4 38.1 36.0 31.9	4,900 6,086 7,076 8,042 9,012 10,008 10,993 11,991 12,968 13,924 14,910 15,948	4.1 4.2 4.2 4.2 4.0 3.9 3.8 3.8 3.8 3.7	200 258 298 339 374 402 432 465 498 528 563 593	72 78 82 82 84 85 86 86 87 87 88	26 30 32 36 37 40 43 46 47 51 54	36 44 58 58 72 77 85 91 96 102 96	18 24 24 30 31 35 37 40 41 40 54	269 319 380 411 454 482 520 561 606 652 670 740	77 95 98 107 114 119 130 137 146 156 165	150 175 187 202 217 231 248 263 279 293 296 304	120 144 193 209 237 251 272 298 327 359 374 435	3.06 2.88 2.65 2.51 2.41 2.31 2.25 2.19 2.15 2.10 1.99 1.91

^{1/} All groupings and the total or average line are on a herd basis.

TABLE 9.--Summary of 1964-65 Owner-Sampler cow-year production, by States 1/2

State	Herd records	Cow-years	Cows per herd	Cow-year Milk	average pr Fat	
Deace	Number	Number	Number	Pounds	Percent	Pounds
AlabamaArizonaArkansas	8	413	51.6	10,316	3.6	376
	3	283	9.4	13,495	3.6	489
	28	1,126	40.2	9,821	3.7	361
Colorado	16	668	41.8	11,072	3.7	411
Connecticut	64	2,354	36.8	12,103	3.9	472
Delaware	15	413	27.5	10,654	4.0	429
Georgia	1	100	100.0	11,728	3.7	439
Idaho	9	128	14.2	10,938	3.8	414
Illinois	342	10,662	31.2	11,671	3.7	435
Indiana	189	5,663	30.0	11,740	3.9	456
Iowa	661	16,096	24.4	11,185	3.7	412
Kansas	65	2,081	32.0	10,933	3.8	411
Kentucky	16	494	30.9	10,570	3.9	410
Louisiana	7	572	81.7	9,292	3.4	318
Maine	95	3,354	35.3	11,392	3.9	445
Maryland	75	3,421	45.6	10,696	3.9	416
Massachusetts	67	2,154	32.1	11,171	3.9	434
Michigan	1,344	39,558	29.4	12,117	3.7	448
Minnesota	1,211	31,914	26.4	11,310	3.7	413
Mississippi	2	159	79.5	10,054	3.7	377
Missouri	8	217	27.1	9,000	4.5	406
Montana	26	1,139	43.8	10,981	3.8	421
Nebraska	58	2,118	36.5	10,903	3.6	395
New Hampshire	43	1,254	29.2	10,364	4.0	418
New Jersey	21	836	39.8	11,378	3.9	439
New Mexico	1	979	978.5	12,934	3.4	444
New York	2,041	73,144	35.8	11,974	3.6	437
North Carolina	35	1,258	35.9	10,991	3.7	411
North Dakota	18	475	26.4	9,296	3.7	346
Ohio	464	12,438	26.8	11,487	3.8	431
Oklahoma	16	794	49.6	10,619	3.6	377
Oregon	9	395	43.9	9,156	4.5	412
Pennsylvania	1,163	32,759	28.2	11,165	3.9	431
Rhode Island	5	193	38.6	8,889	4.1	367
South Carolina	2	80	40.0	8,191	3.8	315
South Dakota	44	1,515	34.4	10,879	3.5	384
Tennessee	1	65	65.0	8,482	4.0	341
Texas	7	382	54.6	11,198	3.8	422
Utah	20	675	33.8	11,646	3.8	438
Vermont	219	7,712	35.2	10,183	4.0	410
Virginia	54	1,750	32.4	11,800	3.7	438
Washington	25	564	22.6	11,614	4.0	463
West Virginia Wisconsin Wyoming	9,884 13	497 296,216 540	35.5 30.0 41.5	8,692 11,272 10,551	4.1 3.7 3.5	359 416 374
Total or average	18,409	559,608	30.4	11,402	3.7	423

 $[\]underline{1}$ / Includes all production data reported.

TABLE 10.--Summary of 1964-65 Owner-Sampler DHIA records, by States $\frac{1}{2}$

TABLE 11.--Summary of 1964-65 Owner-Sampler DHIA yearly herd averages, stratified by butterfat pounds $1/\sqrt{100}$

l.,	ı										
Feed cost per cwt.	W W	2.42	2.16	1.96	1.95	1,94	1,91	1,90	1.78		1.98
Income	S cost	89 118	154 188	228	269	309	359	396	381		251
Feed	20ST	138 151	174	210	232	256	273	290	273		223
Cost of	trares \$	55	84 96	108	123	139	152	167	157		117
Value	product \$	227	328	438	501	565	632	989	654		474
Dry forage	Cont.	53	43	4	94	42	47	77	26		94
Succ. forage	Cwt.	22	62	76	84	90	90	107	71		80
Concen- trates	Cwt	20 26	30	36	43	47	51	24	20		41
Days in	Pct.	75	81	83	84	82	98	86	85		84
to t	rg.	211 258	304	401	844	965	543	592	636		426
t t	Pct.	3.7	7.8	3.7	3,7	3.7	3,8	3.9	4,1		3.7
71.17	rp.	5,757	8,135	10,754	11,970	13,295	14,381	15,297	15,343		11,386
1 40 0 50	No.	30.6	30.2	30.8	31.6	31.7	31.6	29,3	24.5		31,1
Body	CWE	11	##	12	12	12	12	12	11		12
, or or or		6 09	302 951	1,752	1,824	1,089	314	48	9		6,355
20.000	Lh.	175-224 225-274	275-324 325-374	375-424	425-474	475-524	525-574	575-624	625-674	Total or	average

 $\underline{1}/$ All groupings and the total or average line are on a herd basis.

TABLE 12.--Summary of 1964-65 Owner-Sampler DHIA yearly herd averages, stratified by cwt. concentrates fed 1/

	ue Cost of Income	-ueouco	roduct trates cost feed cost milk	জ জ	190	337 4 87 25085	36 131	63 159 210	90 193	114 222 253	138 245 265	161 267 265	187 287 257	199 285 244	169 243 171		
	Dry Va	forage of	μ	Cwt.		3.0											
-	ינט		fed	Cwt.	90	27	88	67	81	83	79	73	99	36	101		
ı	0	ų	t fed			,	11	21	31	39	65	58	89	78	86		
	Days					200											
				Pct. Lb.		3.68		- ,	- /	7	7	7	7	7			
			Milk F	TP.	611	10.276	030	963	167	408	316	953	155	136	841		
			Cow-years	No.	19.3	19.6	31.9	29.7	32.0	31.6	30.7	28.7	27.9	24.5	40,3		
	,	Body	weight	Cwt	12	11	11	11	11	12	12	12	12	12	12		
			Herds	No.	c) 	21	272	1,480	2,377	1,548	200	131	21	П		,
			Grouping	Cwt.	No Rent	Under 5	05-14	15-24	25-34	35-44	45-54	55-64	65-74	75-84	85-Up	Total or	

 $\underline{1}/$ All groupings and the total or average line are on a herd basis.

TABLE 13.--Summary of 1964-65 Owner-Sampler DHIA yearly herd averages, stratified by feed cost per cwt. milk ± 1

cost	cwt.	1k		1.47	66	45	93	43	89	39		86*1
Feed	per	t mi	প	1,1	ī	2.,	2.	er er	3	7.		1.
Income	over	feed cos	બ	245	270	246	205	156	118	52		251
		Ĭ	બ	171	232	268	292	296	305	291		223
Cost of	concen-	trates	બ	90	123	141	147	151	143	130		117
Value		product		416	502	514	497	452	423	343		424
Dry	forage	fed	Cwt.	94	94	43	45	48	94	64		94
Succ.	forage	fed	Cwt.	72	84	84	89	84	87	73		80
Concen-	trates	fed	Cwt	40	40	43	777	43	39	36		41
Days	ţ	mi1k	Pct.	84	84	84	83	82	82	81		84
		Fat	9	427	435	422	397	359	361	257		426
		Fat	Pct.	3.7	3.7	3,8	4.0	4.2	9.4	3,9		3.7
		Mi1k	<u>1.6</u>	11,648	11,693	10,967	9,977	8,647	7,833	6,628		11,386
		ow-years	No.	27.2	33.6	32,7	31.6	29.7	28.4	27.4		31,1
	Body	weight (Cwt.	12	12	11	11	11	10	12		12
		Herds	No	2,200	2,355	1,361	366	62	6	2		6,355
		Grouping	Cents	Under 175	175-224	225-274	275-324	325-374	375-424	425-474	Total or	average

 $\underline{1}/$ All groupings and the total or average line are on a herd basis.

TABLE 14.--Summary of 1964-65 Owner-Sampler DHIA yearly herd averages by breed, stratified by milk pounds $\frac{1}{2}$

Grouping			Cow-years	Milk	Fat	Fat	Days in milk	Concen- trates fed	forage fed		Value of product	Cost of concentrates		Income over feed cos	
Lb. AYRSHIRE	No.	<u>Cwt.</u>	No.	Lb.	Pct.	Ļb.	Pct.	Cwt.	Cwt.	Cwt.	<u>\$</u>	<u>\$</u>	<u>\$</u>	\$	\$
Under 7,500 7,500- 8,499 8,500- 9,499 9,500-10,499 10,500-11,499 11,500-Up Total or average	4 5 17 24 16 4	11 11 11 11 11 11	29.4 25.6 29.4 31.3 24.5 30.1	5,989 7,988 9,077 9,922 10,962 12,935 9,764	3.5 3.9 4.0 4.0 4.0 3.9	208 315 362 396 439 499 388	75 77 82 83 84 87	20 32 33 35 38 43	27 22 55 68 63 109	45 43 43 41 40 53	279 345 435 430 495 575	54 92 111 110 120 115	139 178 212 201 222 254 206	141 167 223 229 273 322 234	2.29 2.23 2.33 2.03 2.03 1.99
GUERNSEY															
10nder 6,500 6,500-7,499 7,500-8,499 8,500-9,499 9,500-10,499 10,500-11,499 11,500-Up Total or average	10 46 86 96 42 20 12	10 10 10 10 10 11 11	19.0 26.1 27.0 30.3 30.8 28.5 27.1	5,929 7,084 8,037 8,945 9,982 11,101 12,598 8,742	4.6 4.7 4.7 4.7 4.5 4.3 3.9	272 332 380 418 445 473 496	79 83 84 85 85 85 85	26 27 33 35 38 44 45	11 57 60 64 67 65 73	48 43 41 38 41 45 42	252 330 378 432 462 522 545	66 75 90 94 109 137 135	140 157 179 184 199 245 235	111 173 199 248 263 277 310	2.37 2.22 2.23 2.06 1.99 2.21 1.88
5,500-6,499 6,500-7,499 7,500-8,499 8,500-9,499 9,500-10,499 10,500-11,499 11,500-12,499 12,500-13,499 14,500-15,499 16,500-16,499 16,500-17,499 Total or average	6 35 101 272 616 961 1,168 950 551 216 43 5	12 11 11 12 12 12 12 12 12 12 12 12 12 1	27.9 29.9 31.9 29.9 31.6 32.6 32.6 31.2 31.9 38.6	6,103 7,094 8,092 9,043 10,040 11,023 11,995 12,954 13,947 14,898 15,891 16,676	3.6 3.7 3.7 3.6 3.6 3.6 3.6 3.6 3.6 3.7	219 264 298 333 366 402 436 472 504 536 575 618	76 78 80 81 82 83 84 85 85 85 87 86	21 26 30 33 36 39 42 45 49 52 54 57	11 45 67 69 78 78 88 92 89 89 83 110	64 44 43 46 45 47 47 47 49 52 49	232 288 321 358 399 444 488 531 575 620 656 736	66 74 82 91 99 109 118 130 141 153 160 193	145 153 171 185 197 211 227 243 254 268 277 326	87 135 150 173 202 233 261 288 321 352 379 410	2.39 2.17 2.11 2.05 1.96 1.91 1.89 1.88 1.82 1.80 1.74 1.96
	.,			,-											
JERSEY Under 5,500 6,499 6,500 7,499 7,500 8,499 8,500 9,499 9,500 -10,499 10,500 -11,499 11,500 -10 Total or average	5 16 54 61 46 24 8 4	9 9 9 9 9 10 10	15.9 25.4 26.6 28.6 30.1 26.4 28.6 34.8	4,851 6,084 7,099 8,073 8,979 9,912 11,081 12,088 8,190	5.5 5.0 5.1 5.0 5.0 4.8 4.6 4.3	267 307 359 405 450 479 507 519	80 81 83 84 85 85 85 85	25 24 32 33 39 41 49 46	37 28 39 48 48 56 77 32	38 37 37 40 36 41 37 51	243 292 356 427 479 523 554 544	63 63 94 106 128 135 146 147	136 127 170 195 212 228 245 248	107 165 186 232 267 295 309 296	2.81 2.10 2.40 2.42 2.36 2.30 2.21 2.06
6,500- 7,499 7,500- 8,499 8,500- 9,499 9,500-10,499 10,500-11,499 11,500-12,499 12,500-13,499 13,500-14,499 Total or average	3 12 15 14 21 10 4 4	13 12 12 12 12 12 12 13 13	22.2 20.7 22.5 23.8 24.8 21.8 22.6 22.6	7,359 7,957 9,023 10,014 10,974 11,765 13,054 13,811	4.0 4.0 4.1 4.0 4.0 4.0 4.0	294 322 371 405 439 467 513 555	77 81 82 84 85 84 86 88	32 35 34 37 41 41 39 53	26 47 56 65 63 79 99 60	59 49 53 51 51 47 69 59	303 315 338 422 430 458 481 612	80 89 79 99 108 108 91 136	172 171 157 195 198 210 195 251	131 144 181 227 232 248 286 361	2.34 2.15 1.74 1.95 1.81 1.79 1.50 1.82
MILKING SHORTHOR	<u>N</u>														
6,500- 7,499 8,500- 9,499 9,500-10,499 Total or average	1 1 3 5	11 12 11	10.5 27.3 26.2 23.3	6,638 8,586 9,885 8,976	3.7 3.3 3.8 3.7	246 282 377 332	81 72 86 82	42 23 29 31	9 104 82 72	47 18 42 38	238 260 342 305	84 52 77 73	162 109 157 148	76 151 185 157	2.44 1.27 1.58 1.69
MIXED BREEDS			,												
Under 6,500 6,500-7,499 7,500-8,499 8,500-9,499 9,500-10,499 11,500-12,499 12,500-13,499 13,500-14,499 14,500-15,499 Total or average	10 18 56 108 147 166 107 87 29 12 2	11 11 11 11 11 11 11 11 11 11	30.2 28.4 27.7 25.6 26.8 28.4 28.3 28.9 27.5 24.0 25.3	6,027 7,102 7,996 9,034 10,020 11,006 11,990 12,960 14,047 14,840 15,597	4.3 4.2 4.1 4.0 3.9 3.8 3.8 3.8 3.8 3.8	261 299 326 364 390 428 461 490 528 566 598	81 82 83 84 85 85 85 85 85	27 28 33 35 38 43 48 49 52 54 58	45 54 65 62 71 84 82 88 73 69 111	40 35 37 43 44 42 44 42 49 46 37	265 324 356 400 441 491 543 573 596 688 666	76 78 99 107 116 127 142 152 149 173 187	161 172 206 213 230 246 269 286 276 313 305	104 152 150 187 211 245 274 287 320 375 361	2.67 2.44 2.58 2.36 2.29 2.24 2.21 1.96 2.11 1.95

 $[\]underline{1}/$ All groupings and the total or average line are on a herd basis.

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